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Patent Claims

1. A method for stationary-mode air conditioning, characterized by the steps,
(S1) activation of an air conditioning assistant (4),
10 (S2) inputting of an arrival time of a user at which a preset air conditioning state is to be reached,
(S3) sensing of climatic peripheral conditions,
(S4) determination of which air conditioning measure of heating, cooling and/or venting is necessary, and of
15 when this air conditioning measure has to start, from the arrival time which has been input in step S2 and the climatic peripheral conditions sensed in step S3, in order to attain the preset air conditioning state at the arrival time, by the air conditioning assistant (4)
20 with a closed-loop control device (4a), and automatic starting,
(S5) automatic starting of air conditioning means (1, 1a, 1b, 1c, 1d) at the beginning of the air conditioning measure determined in S4, and execution of
25 the air conditioning measure determined in step S4, and
(S6) resetting of the air conditioning assistant (4) to an inactive state as soon as an arrival time which has been input in step S2 is attained.
- 30 2. The method for stationary-mode air conditioning as claimed in claim 1, characterized in that manual adaptation of the preset air conditioning state is carried out in a step S1a.
- 35 3. The method for stationary-mode air conditioning as claimed in claim 1, characterized in that the preset air conditioning state is either an air conditioning state which is preset at the works or an air

conditioning state which is set automatically during the driving mode.

4. The method for stationary-mode air conditioning as
5 claimed in one of claims 1 to 3, characterized in that the sensing of climatic peripheral conditions in step S3 includes sensing of an external temperature, a solar load, an engine temperature and/or a passenger compartment temperature of the vehicle.

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5. The method for stationary-mode air conditioning as
claimed in one of claims 1 to 5, characterized in that,
in step S4, information about an existing resource
supply is taken into account in addition to the arrival
15 time which has been input in step S2 and the climatic peripheral conditions which have been determined in step S3, during the determination of the air conditioning measure and of the start of the air conditioning measure.

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6. The method for stationary-mode air conditioning as
claimed in claim 6, characterized in that the
information about an existing resource supply contains
information about the existing fuel quantity, the
25 charge state of the battery or batteries etc.

7. The method for stationary-mode air conditioning as
claimed in one of claims 1 to 6, characterized in that,
in a step S5a, a vehicle battery is charged via a solar
30 panel during a predetermined time period before the start of the air conditioning measure, and in a subsequent step S5b a ventilation blower (1a) is operated at a higher ventilation setting starting from the start of the air conditioning measure, from the
35 vehicle battery which has been charged in this way.

8. The method for stationary-mode air conditioning as
claimed in claim 7, characterized in that the charge

time of the solar panel in step S5a is lengthened if the information about an existing resource supply indicates that the resource supply is particularly low.

5 9. The method for stationary-mode air conditioning as claimed in one of claims 1 to 8, characterized in that, in step S4 the air conditioning means (1, 1a, 1b, 1c, 1d) for carrying out the air conditioning measure are selected in such a way that the preset air conditioning
10 state is attained at the arrival time with the smallest possible consumption of resources.

10. The method for stationary-mode air conditioning as claimed in one of claims 1 to 9, characterized in that
15 the closed-loop control device brings about, as an air conditioning measure, ventilation by means of a blower (1a), air conditioning by means of an electric compressor (1b), heating by means of a fossil fuel burning device (1c), shading of the windows by means of
20 roller blinds (1d) etc.

11. The method for stationary-mode air conditioning as claimed in one of claims 1 to 10, characterized in that the closed-loop control device (4a) additionally brings
25 about automatic opening or closing of windows and/or of a sunroof in order to attain the preset air conditioning state more quickly, and select the start of the air conditioning measure so that it is closer overall to the arrival time.

30 12. A device for stationary-mode air conditioning having:
air conditioning means (1, 1a, 1b, 1c, 1d) for carrying out air conditioning measures during the stationary-
35 mode air conditioning,
characterized by
a device (2) for inputting an input time of a user at which a preset air conditioning state is to be

attained,
a device (3) for sensing climatic peripheral
conditions, and
an air conditioning assistant (4) having a closed-loop
5 control device (4a) for determining which air
conditioning measure of heating, cooling and/or
ventilating is necessary and when this air conditioning
measure has to begin in order to attain the preset air
conditioning state at the arrival time, from the
10 arrival time which has been input and the sensed
climatic peripheral conditions, and for automatically
starting the air conditioning means at the determined
starting time of the air conditioning measure and for
automatically switching off the air conditioning
15 assistants (4) as soon as the arrival time which has
been input is attained.

13. A device for stationary-mode air conditioning as
claimed in claim 10, characterized in that a device (5)
20 for manually adapting the preset air conditioning state
is also constructed.

14. A device for stationary-mode air conditioning as
claimed in claim 10 or 11, characterized in that the
25 device (3) for sensing climatic peripheral conditions
senses an external temperature, a solar load, an engine
temperature and/or a passenger compartment temperature
of the vehicle.

30 15. A device for stationary-mode air conditioning as
claimed in one of claims 10 to 12, characterized in
that a device (6) for sensing an existing resource
supply and outputting information about an existing
resource supply also has, and the closed-loop control
35 device (4a) for determining which air conditioning
measure of heating, cooling and/or ventilating is
necessary and when this air conditioning measure has to
start, in order to attain the preset air conditioning

state at the arrival time, takes into account information about an existing resource supply from the device (6) for sensing an existing resource supply, in addition to the arrival time which has been input and
5 the climatic peripheral conditions.

16. The device for stationary-mode air conditioning as claimed in claim 13, characterized in that the device (6) for sensing an existing resource supply senses the
10 existing fuel quantity, the charge state of the battery or batteries etc. and outputs information about the sensing result.

17. A device for stationary-mode air conditioning as claimed in one of claims 10 to 14, characterized in that the closed-loop control device (4a) selects the air conditioning means (1, 1a, 1b, 1c, 1d) for carrying out the air conditioning measure, in such a way that the preset air conditioning state is attained at the
15 arrival time which has been input, with the minimum possible consumption of resources.

18. A device for stationary-mode air conditioning as claimed in one of claims 10 to 15, characterized in that the closed-loop control device (4a) is constructed
25 in such a way that, during a predetermined time period before the start of the air conditioning measure, it can cause a vehicle battery to be charged by means of a solar panel, can subsequently cause a ventilation
30 blower (1a) to be operated by means of the previously charged vehicle battery and shift the start of the air conditioning measure correspondingly closer to the arrival time.

35 19. The device for stationary-mode air conditioning as claimed in one of claims 12 to 18, characterized in that the air conditioning means (1, 1a, 1b, 1c, 1d) comprise a blower for ventilating (1a), an electric

compressor for stationary-mode air conditioning (1b), a fossil fuel burning device for operating a stationary-mode heater (1c), shading devices for the windows (1d) such as, for example, roller blinds etc.

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20. The device for stationary-mode air conditioning as claimed in one of claims 12 to 19, characterized in that the closed-loop control device (4a) can automatically open windows and/or a sunroof as an
10 additional air conditioning measure.